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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/820,280

04/08/2004

Jack W. Adoline

BGEE 2 00017

8603

27885

7590

11/27/2006

FAY, SHARPE, FAGAN, MINNICH & MCKEE, LLP  
1100 SUPERIOR AVENUE, SEVENTH FLOOR  
CLEVELAND, OH 44114

EXAMINER

SY, MARIANO ONG

ART UNIT

PAPER NUMBER

3683

DATE MAILED: 11/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/820,280

Applicant(s)

ADOLINE ET AL.

Examiner

Mariano Sy

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-86 is/are pending in the application.
- 4a) Of the above claim(s) 33-40, 42-48, 63-71 and 77-83 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32, 41, 49-62, 72-76 and 84-86 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>07/24/06; 10/02/06</u> .                                      | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. The amendment filed on October 2, 2006 has been received.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3-13, 27-32, 41, 49, 50, 57-62, and 73-76 are rejected under 35 U.S.C. 102(b) as being anticipated by Thompson (US 1,329,561).

Re-claims 1, 3-13, 27-32, 41, 49, 50, 57-62, and 73-76 Thompson disclosed, as shown in fig. 1, a spring system comprising a housing 8 having an axis, an internal chamber, and axially opposite bottom and top ends, a rod member 14 coaxial with said axis and positioned within the internal chamber and having an inner end in said housing and an outer end axially outwardly of said top end, a guide member 15 on said inner member of said rod member for reciprocating axially in said housing, and first 23 and second 21 compression springs each extending between said guide member and the bottom end of said housing, first and second springs being coaxial with one another and with said axis, at least one of said springs at least partially applying a force on said guide member as said rod member moves between retracted and extended positions, at least one said springs having a free length that is at least a majority length of said internal chamber, said guide member dividing said internal chamber into at least two

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sub-chambers, said guide member including a first passageway (clearance between inside diameter of housing and outside diameter of guide member) that at least partially regulates fluid flow between said at least two sub-chambers, said outer end of said rod member including a mounting element.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 2 and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson in view of Van Crombrugge (US 1,605,798) or in view of Wilbur (US 1,857,750).

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Re-claims 2 and 72 Thompson failed to disclose wherein the direction of winding of said first compression spring is opposite to the direction of winding of said second compression spring.

Van Crombrugge or Wilbur teaches wherein the direction of winding of first compression spring is opposite to the direction of winding of said second compression spring.

It would have been obvious to one of ordinary skill in the art to provide the coaxial springs of Thompson with the direction of winding of first compression spring is opposite to the direction of winding of said second compression spring, as taught by Van Crombrugge or Wilbur, as a matter of design choice in order to provide a higher contact force.

7. Claims 14-26 and 51-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson in view of Yokoyama (US 5,937,962).

Thompson failed to disclose the guide member includes a one way valve arrangement and a second passageway and wherein the second passageway has a maximum fluid flow rate that is less than a maximum fluid flow rate of the first passageway.

Yokoyama teaches, as shown in fig. 4, a piston 99 having a one way valve arrangement 107 and a second passageway 106 and wherein the second passageway has a maximum fluid flow rate that is less than a maximum fluid flow rate of the first passageway.

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It would have been obvious to one of ordinary skill in the art to have merely utilize the known teaching of piston having a one way valve arrangement and a second passageway into the spring system of Thompson, as taught by Yokoyama, in order to change the damping characteristics of the spring system depending the type of application.

8. Claims 84-86 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson in view of Svendsen (US 5,855,363).

Re-claims 84-86 Thompson was silent to disclose the first and second springs are in a partially compressed state when the spring rod member is in said fully extended position.

Svendsen teaches pre-loading for spring assembly.

It would have been obvious to one of ordinary skill in the art to partially compress the spring when the spring rod member is in said fully extended position into the spring system of Thompson, in view of the teaching of Svendsen, in order to provide a desired stiffness of the spring prior to application of load.

9. Applicant's arguments with respect to claims 1 and 49 have been considered but are moot in view of the new ground(s) of rejection.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariano Sy whose telephone number is 571-272-7126. The examiner can normally be reached on Mon.-Fri. from 8:30 A.M. to 2:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan, can be reached on 571-272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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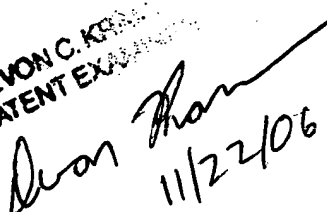
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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 M. Sy

November 20, 2006

DEVON C. KRAVITZ  
PATENT EXAMINER  
  
11/22/06